From the Sociocultural Theory by Vygotsky to its Didactic Application: A Case Study of German Language Learning in an Italian Context

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Abstract

The aim of this work is to investigate and describe the teaching methods in the field of the German language that emphasize cooperation and interaction, demonstrating how participants in a case study benefit from these approaches, ultimately enhancing their linguistic skills. The initial section of this paper will establish a theoretical framework grounded in Lev Vygotsky's Sociocultural Theory, which underscores the significance of social interaction in cognitive development. Following this, the paper will detail the transformative changes in foreign language teaching, particularly through the lens of the Common European Framework of References for Foreign Languages (CEFR) and peer-to-peer teaching methodologies. These frameworks foster the progressive development of socio-communicative competencies essential for effective language acquisition. The concluding section will present a case study conducted within an Italian university context, involving ten students. The study adheres to the principles of peer-to-peer learning, facilitating an environment where students actively engage with one another, thereby enriching their educational experience and promoting collaborative skill development. Through qualitative data collection and analysis, this study aims to elucidate the tangible benefits of cooperative learning in mastering the German language, providing insights into best practices for future pedagogical strategies.

Keywords: *Sociocultural Theory, Second Language Acquisition Theory, Cooperative Learning*

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[1]Introduction

The 20th century witnessed the emergence of groundbreaking theories in the field of language acquisition, fundamentally transforming the way foreign language learning was conceptualized. Among these, Sociocultural Theory (SCT), originally developed by Lev Vygotsky in the late 1920s and early 1930s, has made a profound contribution to the development of Second Language Acquisition Theory (SLAT). This theory, often regarded as a cornerstone in understanding language learning in educational contexts, offers a powerful framework that underscores the inherently social nature of language acquisition (Vygotsky, 1934). Rather than viewing language acquisition solely as an individual cognitive process, SCT posits that it is a socially mediated activity where interaction and collaboration are essential to cognitive development.

This perspective highlights the pivotal role of peer interactions in learning, suggesting that students engage in meaningful dialogue and cooperative tasks to facilitate language mastery. Numerous studies, including those by Salma (2020), Richards and Rodgers (2001), Krammer et al. (2015), Ellis (1999), and Swain (1985), consistently demonstrate that interactive peer-learning contexts foster both heightened motivation and enhanced performance. These studies reinforce the idea that learning is most effective when learners actively engage with one another in real-world communicative situations.

In this regard, the communicative approach to language teaching has emerged as a powerful methodology, prioritizing genuine communication and interaction over rote memorization of grammar and vocabulary. Techniques such as role-playing, group projects, and peer analysis immerse learners in authentic scenarios, enabling them to actively use the language. This approach aligns with the objectives set forth by the Common European Framework of Reference for Languages (CEFR), which emphasizes the development of socio-communicative competencies alongside traditional language skills.

This shift marks a departure from more traditional, grammar-based teaching methods toward a more dynamic, learner-centered model. It reflects a broader evolution in foreign language education, where learners are encouraged to become active participants in communication, moving beyond mechanical exercises to focus on authentic language use.

In the following sections, this paper will explore sociocultural approaches to language teaching and learning, offering a detailed overview of the principles and innovations introduced by these theories. Additionally, the concepts of cooperative and peer-to-peer learning will be examined in depth, alongside an analysis of a case study that demonstrates the methodologies and exercises employed. By integrating both qualitative and quantitative research methods, this paper will assess the effectiveness of collaborative learning strategies, while also shedding light on learners' experiences and emotional responses throughout the process.

An Overview on Sociocultural Approaches in Language Learning and Teaching

According to John Wertsch (1985), Vygotsky (1934, 1978) based his theory on three principles derived from Karl Marx's philosophy. The first principle is that human consciousness has a social origin, not just a biological one. The second principle states that human activity is

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mediated by abstract or concrete tools and signs. The third and final principle is based on the holistic science, which relates the individual to their context and the general, rather than reducing them to a mere representation of mechanical-biological existence (p. 199).

Before the emergence of sociocultural theory, cognitivist studies proposed a theory of language acquisition that was linked to mental processes (Piaget, 1926; Chomsky, 1957, 1965). With the introduction of sociocultural approaches, language acquisition was first viewed as a social process in which information is constructed externally and then internalized. Sociocultural theories do not disregard the foundation of cognitive studies on language learning, but rather emphasize the importance of concepts such as interaction, collaboration, cooperation, and social development.

Dealing with sociocultural theory means discussing the mechanisms of interaction, negotiation, and mediation it entails. The first concept, interaction, takes centre stage: for years, the computer metaphor has been used as a reference model, which understands the human being as an information processing system that receives input elements, processes them, and makes them available as output. S. Krashen, the author of the 'Input Hypothesis', believes that language acquisition is an unconscious process that occurs automatically through the reception of linguistic utterances. This differs from the concept of language learning, which is a conscious process of discovering and acquiring knowledge of a language (Krashen, 1985, p. 1).

A few years later, Krashen's model experienced a revival from which sociocultural theories derived their essential feature, namely interaction. Additionally, it provides further details on the concept of negotiability and effective negotiation of input, which are key ideas of Vygotsky's theory. Long (1981, pp. 259-278) proposed the Interaction Hypothesis, which suggests that adjustments occur interactively between native speakers (NS) and non-native speakers (NNS) during communication difficulties, leading to input comprehensibility and L2 development. Specifically, according to Morell (2004) "Negotiation of meaning is a key aspect of interaction, occurring when at least two interlocutors work together to achieve mutual comprehension of their utterances" (pp. 325-338). This mutual comprehension is achieved through a solicitation-to-reflection relationship based on the signal-response type (Pica et al., 1995, p. 4). During the negotiation process (Long, 1981, passim), the learner repeats the same chunk, adjusts structures, segments constituents, changes words, or modifies forms.

Negotiation of input and interaction are thus two strongly linked notions that, in the background of Vygotskian social-interactionist development, have their roots not only in the cognitive nature of Long's hypothesis but also in the constructivist approach of the 1980s by Jean Piaget. Expanding on the cognitivist perspective, Piaget demonstrated how the learner plays an active role in exploring new knowledge. The child undergoes a process of 'adaptation to the environment', assimilating experiences that are then integrated into pre-existing cognitive structures. In other words, the learner actively constructs knowledge.

Vygotsky links up with constructivism by identifying human nature as the sociocultural product of tools that each generation develops and transmits, strongly supporting the concept of mediation, another cornerstone of sociocultural theory. Indeed, Baumann (2018, p. 251) states that signs are embedded in the social and cultural context in which a person grows up. Mediation is the process of transmitting information using signs and tools to master mental processes. The main difference between signs and tools mostly related to a directional perspective: the tool acts as a form of mediation outwards, intended to change nature, while

the sign, conversely, represents a form of mediation inwards (self) and does not produce any external change. (Vygotsky, 1934, 1960)

Cultural tools, which help to adapt to reality, come in different forms: material, such as clocks, books, compasses, and pictures, or conceptual, such as scientific theories, alphabetical competence, the numerical system, and language. The Russian psychologist focuses precisely on language, including how one speaks, what one talks about, gestures, tone, etc. Language plays a major role in the child's acquisition of culture by virtue of its dual nature: it serves not only as an instrument towards the outside world, but at the same time as a sign of internalization. (Vygotsky, 1978) To further illustrate the concepts of mediation and internalization, Vygotsky investigates Piaget's concept of egocentric language. Flavell et al. (1966) propose the neutral term 'Private Speech' instead of 'egocentric' to avoid negative connotations. However, according to Jean Piaget, there are two groups of sentences with two different functions: egocentric speech on the one hand and socialized speech on the other. The child, who produces utterances of the first type, "he does not bother to know to whom he is speaking nor whether he is being listened to. He talks either for himself or for the pleasure" (Piaget, 1926, p. 9). Socialized language, on the other hand, includes locutions used in communicative interaction to ask, provide information, and convey one's thoughts through actual communicative acts (Culpeper et al., 2018, pp. 238-244). According to Vygotsky, egocentric language is internalized as thought and acts on material reality, modifying action and leading to consciousness-raising. It guides the child's actions, subjecting them to intentions and a plan.

To summarize, Vygotsky argues that "the true direction of the development of thinking is not from the individual to the social, but from the social to the individual" (1986, p. 36), thus understanding mediation through language as the enabling tool of mental processes development, that move from an inter-psychic to an intra-psychic reality, defining a contrastive relationship between social (external) and individual (internal).

From the Zone of Proximal Development (ZPD) to the Scaffolding

As already said, learning is a process that occurs from 'External Regulation' to 'Self-Regulation', in which inter-mental (social) development precedes intra-mental (individual) development (Vygotsky, 1986). This is a key concept with implications not only for theory and linguistics, but also for practical and didactic applications. The sociocultural theory of learning is based on the idea that learners construct knowledge through active guidance from more knowledgeable others. This means that imitation is no longer seen as a passive behaviourist interpretation, but rather as "the first truly cultural learning" (Tomasello, 1999, p. 81), in which the child, and more generally the learner, actively participates in the process of 'imitative learning' (Ibidem). Teachers, or more capable peers, guide learners to perform activities that they are unable to do themselves. In this way, learners internalize the skills or knowledge necessary to perform independently, without the need for mediation by others.

Like Krashen's computer metaphor (Krashen, 1981, 1982, 1985) the corresponding metaphor for Vygotsky's theory was found in the Zone of Proximal Development (ZPD). Vygotsky's works can only be read, interpreted and understood through an awareness of the meaning and functions of ZPD, which is defined as "the distance between the actual developmental level as determined by independent problem solving and the level of potential

development as determined through problem solving under adult guidance or in collaboration with more capable peers". (Vygotsky, 1978, p. 86)

The Zone of Proximal Development provides a wide range of possibilities for cognitive growth: learning and teaching are perfectly combined and find their synthesis in the development of the learner. The dialectical relationship between what the child knows and what the child can do with external help is exemplified by the interconnection between the ZPD and the Zone of Actual Development (ZAD). The latter, in fact, represents the foundation of knowledge that during the learning process will ultimately lead to 'self-regulation' (Lantolf, 2011, p. 29). In other words, the child will become autonomous and able to master and act independently, resulting in their Zone of Proximal Development becoming the Zone of Actual Development. We refer specifically to a dialectical relationship because the terms 'potential' or 'proximal' do not accurately define learning boundaries: once the zone of actual development has been established, a new zone of proximal development will always emerge around it. This zone is hypothetical, potential, and future, representing possibilities to be realized without any predetermined limits.

In education, utilizing learners' Proximal Development Zones is a significant advantage because it allows the teaching system to be customized to the learners' needs and proximal goals. Understanding ZPDs as a tool also enables the quantity and quality of mediation provided to be adjusted or even eliminated: *"mediation should be removed when the student demonstrates the capacity to function independently"* (Lantolf, Thorne, & Poehner, 2015, pp. 207–226). The Zone of Proximal Development (ZPD) is a crucial concept in the Scaffolding technique. This is a theoretical and metaphorical construct used in education, with its etymology rooted in the semantic sphere of building and construction. The term 'scaffold' refers to a support structure used in the construction or renovation of buildings. In education, the concept was introduced in the 1970s by Bruner and Sherwood (1976, pp. 277–285). According to Wood et al. (1976), scaffolding refers to the support provided by an adult "that enables a child or novice to solve a problem, carry out a task or achieve a goal which would be beyond his unassisted efforts" (p. 90). From an educational assessment perspective, Scaffolding is often associated with dynamic assessment, where teachers provide tailored support based on each student's current understanding.

The scaffolding technique gained in popularity a few years later among Second Language Acquisition Theory (SLAT) scientists, including James P. Lantolf. Research has enabled a critical examination of the practical application of scaffolding not only in the asymmetrical teacher-student pair but also in the student-student pair, where they collaborate to achieve a shared purpose.

SCT as a Theoretical Foundation for Foreign Language Teaching
The studies by Vygotsky (1934, 1978), Luria (1974) and Piaget (1926) were conducted in the pedagogical field, observing the behaviour, stimuli, and reactions of children in the context of first language (L1) learning. In these terms, sociocultural theories consider language teaching, not just language learning as the point of application. Vygotsky (1978) identified an inseparable dialectical connection and defined it in Russian as *obuchenie*, which refers to the synthesis of the teaching-learning relationship: "the Russian word, obuchenie, refers to a double-sided process, one side of which does indeed refer to learning (a change in the psychological

processes and knowledge of the child), but the other of which refers to the organization of the environment by the adult [...]" (Cole, 2009, p. 292). The teacher's and learner's actual and potential areas of development therefore come into close contact, being influenced by each other. What Vygotsky's sociocultural theory emphasizes is the evaluation of learning by observing, through the "functional method of double stimulation" (Vygotsky, 1978, p. 78). This involves observing the child not only solving a more difficult problem (object-regulation) but also regulating their own behavior in relation to the task (self-regulation) (Lantolf, & Thorne, 2007).

Sociocultural studies in the field of second language (L2) learning received a significant boost from educational assessment, specifically Dynamic Assessment, which was introduced in Poehner's dissertation (2005). The fundamental principle of DA is that effective instruction necessitates not only the assessment of what individuals or groups can do independently, but also gathering information on how students respond to instruction, such as through the mediation provided. What makes it 'dynamic' is "whether or not mediation is integrated into the assessment process" (Lantolf & Thorne, 2006).

Didactic perspective of DA addresses the issues of mediation and internalization transcending the traditional approach of merely asking questions and receiving answers. Its aim is to involve the learner's ZPD, introducing the amount of change that can be elicited during interactions with the expert. This includes both quantitative and qualitative changes in the subject's learning as well as changes in the type of mediation that the caregiver offers. (Poehner & Lantolf, 2005)

As will be discussed in the following section, changes in foreign language teaching, such as the introduction of socio-cultural approaches to education, have been mostly encouraged by political institutions that promote their implementation on a large scale.

New Goals for the Foreign Language Teaching

Currently, language teaching reforms are primarily driven by the European Union among member states. The EU has raised concerns regarding linguistic diversity, and how to both preserve and promote it. Additionally, there is a growing interest in regulated transparency and intra-European comparability in the field of language certifications.

The European Union is thus committed to multilingualism by declared political will. Some of the key points outlined by the Council conclusions of 20th May 2024 on multilingualism and the development of language competences (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX%3A52014XG0614(06)) is the call for member states to:

1. Adopt and improve measures aimed at promoting and enhancing the quality and efficiency of language learning and teaching, including by teaching at least two languages in addition to the main language(s) of instruction from an early age and by exploring the potential of innovative approaches to development of language competences.

2. Make efforts to develop appropriate methods for assessing language proficiency in accordance with the Annex hereto.

[...]

5. Make greater use of European transparency tools and initiatives designed to support and promote language learning, such as the Common European Framework of Reference for Languages, Europass, the European Language Portfolio and the European Language Label.

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The EU's work has its origins in the 70s. The focus shifted to the learner's communicative needs in a given context and how to act through language. This approach emphasizes the importance of context and communication in language learning. It is not a coincidence that two types of competence have been defined: sociolinguistic competence, which is the ability to recognize social linguistic variety and adapt the message to different inter- or intracultural contextual factors, such as the use of a dialect; and pragmatic competence, which is the ability to formulate and adapt one's message to the context, used to realize codified communicative functions. Therefore, it is known in Language Teaching field as '*Kommunikative Wende*' (Becker-Mrotzek & Böttcher, 2011), or 'Communicative Turn', as it focuses on "the concepts of lifelong learning, learner-centeredness and autonomy as well as situation analysis and learner needs" (Mirra, 2018).

Shortly afterwards, changes were also incorporated into the language assessments, which no longer only considered the learner's grammatical competence but also communicative competence. Indeed, the concept of 'Language Survival' was introduced in 1971, which is closely related to the idea of communicative survival. The 'Modern languages project' (Trim, 2007) was established to establish levels on a scale, thus determining and assessing degree of language proficiency. From this project, strongly marked by communicative competence, was born what today is now internationally known as the 'Common European Framework of Reference for Languages: Learning, Teaching, Assessment' (https://www.coe.int/en/web/common-european-framework-reference-languages/). The CEFR was revised and updated in 2018 and subsequently in 2020 to conform to current European Union regulations. Without detracting from the original conceptual framework of the CEFR, 'Companion Volume of Common European Framework of References for Languages: Learning, teaching, assessment' has introduced an innovative and internationally-focused approach to foreign language teaching. This framework finally emphasizes social inclusivity and formative development, while also providing precise assessment through the introduction and use of common descriptors.

The CEFR addresses both language and general competence, which are both rooted in the advancement of communicative competence. The juxtaposition 'Communicative competence' was introduced by Hymes (1972, pp. 269-293), in response to Chomsky's (2002/1965) juxtaposition of the terms 'linguistic competence', defined as "native speaker's implicit knowledge of the grammatical rules governing her/his language".
Focusing on the learner's communicative competence ensures consideration of the learner's socio-cultural context, rather than constructing an ideal speaker model. Using the communicative approach involves, above all, monitoring progress towards expected goals and the development of interlanguage by emphasizing the motivational component and the individual's language needs (Ciftcioglu, 2022).

With the Communicative Turn*,* foreign language teaching abandoned the pursuit of fixed theories and methodologies, finally embracing diversity as an asset. According to Decke-Cornill and Küster (2005), the communicative classroom is characterized by "*Variabilität, Improvisation, Kreativität*" (Variability, Improvisation, Creativity) (p. 118). This promotes dynamic teaching through group work and both symmetrical (peer-to-peer) and asymmetrical (teacher-learner) social interaction. It also values spontaneous and natural exchange of information. European States have recently shifted their focus in education towards

communicative and interactive processes; as a result, teaching methodology has adapted to the sudden change, promoting new strategies and methodologies. As an illustrative example, this communicative change may be observed in the utilisation of the peer-to-peer system and Cooperative Learning that will be discussed in the following section.

Cooperative Learning and Peer-to-Peer System

Didactics originally had a rigid, tripartite structure consisting of teacher – content – learner, which is also known as the "theory of the teaching triangle" (Houssaye, 1988). It presents a rigidly systematic scheme of didactic action, in which the teacher is responsible for explaining, planning and helping to transmit knowledge, while the learner is expected to listen, codify, formulate and acquire knowledge (Houssaye, 1988, p. 40). However, sociocultural theory and recent developments brought about by the CEFR have broken this fixed pattern. In fact, teaching is now complemented by forms of cooperative and interactive work, as it involves a problem-solving process that benefits from dialogue. The classroom environment is becoming more like a laboratory for experimental learning, where teachers are encouraged to try out new teaching methods and conduct empirical experiments.

The benefits of cooperating and interacting lie in the development of social and communication skills, as "[…] the students' tasks are not to do something as a team, but to learn something as a team" (Slavin, 1995, p. 5). However, it is important to consider the negative aspects of time-intensive and more unpredictable control over learning processes as discussed by Völlinger et al. (2018, pp. 573–589).

Cooperative Learning should not be mistaken for mere group work or team activities. Instead, it begins with individuals recognizing their own competences and making them available to the community in order to form a social one. Each member can only succeed if the others do as well and must coordinate their efforts to ensure that each member achieves their specific goal to solve the group task (Adl-Amini & Völlinger, 2021). Cooperative learning means learning with and from the others, while also contributing to each other's learning process as well as one's own. In other words, learners fully meet 'positive interdependence' because they share a common team goal that positively influences them to succeed. In contrast, competition favours 'negative interdependence' in which the success of learner A is contingent on the failure of the learner B. (Büttner et al., 2012, pp. 2–3.).

In this context, the concept of Self-Regulation is crucial, as it not only motivates learners to achieve a common goal, but also requires them to regulate themselves to achieve the goal. Although members work towards the same goal, the group needs to assign roles independently in a structured manner. These roles include a 'facilitator' who coordinates the group's work, an 'observer' who analyses the effectiveness of communication strategies, a 'scribe' who notes down what the group has decided, a 'keyboarder' who transcribes data on an electronic device, a 'timekeeper' who manages time and helps with deadlines, and a 'reporter' who presents the group's work. To ensure equal opportunities and development for all team members, roles must be interchanged at each job (McCafferty et al., 2006, p. 41).

Effective group collaboration requires strong communication skills and leadership readiness, including active listening and conflict resolution, as well as organisational skills such as task delegation. According to Vygotsky's theory, peer collaboration is not only limited to a

perspective of group supervision by the teacher but as previously mentioned, it also brings a new way of conceiving learning, namely peer tutoring.

Defined by Utley, Mortweet and Greenwood (2017) as "a class of practices and strategies that employ peers as one-on-one teachers to provide individualised instruction, practice, repetition and clarification of concepts" (p. 7), the peer-to-peer system would seem to highlight the beneficial results of learners' language acquisition processes. The unique aspect of Peer Tutoring lies in the interchangeability of roles. This refers to the relationship between an expert student, who takes on the role of a tutor, and the tutee learner. Mentoring was initially intended as a supplementary for underperforming students. Learners benefit greatly from the scaffolding of informal and purely spontaneous teaching:

(a) They can exchange ideas and discuss topics much more freely, as, in language teaching field terms, the affective filter is almost completely eliminated.

(b) Working together, tutors and tutees can solve problems that they would not be able to solve alone, as errors are properly addressed as a stage in the acquisition process.

(c) Discussing problems with a more competent peer is more likely to promote cognitive advancement than discussing them with a less competent peer. Consequently, it is common for individuals to exchange information or provide open criticism, which usually only occur in the presence of acquaintances, are very common. (Azmitia & Montgomery, 1993, pp. 202–221).

(d) Decrease in discontinuous behavior (lack of attention, inconstancy, disturbance…).

(e) Increased success and self-confidence (Greenwood, et al., 1992, pp. 101–116).

Two Peer Tutoring models have been identified in Classwide Peer Tutoring (CWPT) and Peer-Assisted Language Strategies (PALS). CWPT was developed in the 1980s as a means to improve the spelling accuracy of low-achieving students. Since the teacher did not want to teach students of different levels, the model was used as a tool for inclusion. During CWPT sessions, all learners are paired with a partner and each pair is assigned to one of the two competing teams. During the Mid-session, the tutors switch roles with their tutees. The tutors prioritize the quality of the tutoring and award bonus points to the tutees who exhibit correct teaching behaviour (Utley, Mortweet & Greenwood, 2017, p. 12).

A Peer Tutoring model is the Peer-Assisted Learning Strategies (PALS), developed by researchers at Vanderbilt University in collaboration with local school districts (cf. McMaster, D. Fuchs & L.S. Fuchs, 2006, pp. 5-25). PALS involves tutors and learners interacting in a series of structured activities over three weekly sessions of 35 minutes each. These sessions offer paired reading exercises with repetition, synthesis, and simulations. At the end of each week, the team assesses individual learning progress and rewards it with bonus points. The points earned by each individual are then added up to determine the winning team. Teachers utilize brief lessons to guide all students through the activities independently. Over 15 years of research has shown the effectiveness of the CWPT program in enhancing the reading performance of students at all levels of achievement, including those with disabilities and English language learners, from kindergarten to high school (McMaster, D. Fuchs & L.S. Fuchs, 2006). The Peer Assisted Learning Strategies program follows the principles of the CWPT project including pair building, reciprocity of roles, final reward as motivation input, and integrates more strategic components.

Another peering system, Reciprocal Peer Tutoring (RPT), was developed in the late 1980s and has been used as a remedial program for low-achieving, high-risk failing students in urban primary schools (cf. Fantuzzo, Polite & Grayson, 1990, pp. 309-323). RPT was also designed to take advantage of components of peer teaching and interdependence between randomly assembled pairs of students. In the RPT, as in the CWPT and the PALS project, students serve as both teachers and students during the tutoring sessions and follow a pre-established format of mutual interaction. Specifically, RPT involves an initial 20-minute mutual coaching session, followed by a 7-minute worksheet testing session. Peers select rewards and goals from a list provided by the teacher. Finally, peers monitor and evaluate their own performance as well as that of their peers (see Fantuzzo & Ginsburg-Block, 1998, pp. 121–144).

To sum up, Vygotsky's theories, language teaching studies and recent developments in foreign languages learning are strictly connected, because they have highlighted the essential role of socio-communicative components in language acquisition. The increasing role of interaction in language teaching is increasingly shaping the psycho-pedagogical dimension of the learner, seen as an active participant in the intercultural, multilingual and metacognitive construction of cognitive identity. As the following section will illustrate, sociocultural theory can be effectively applied to real classroom contexts in which participants engage in both direct communication and the observation of others.

Case Study: Methodology, Aims, Reflection, Evaluation

The presented case study combines sociocultural theory, German language learning by Italian-speaking learners, collaborative/cooperative methods and, finally, offer empirical research input on the peer-to-peer system. The author of this paper was responsible not only for the development of the structure and content of the course but also for the creation of the empirical project, data collection, processing, and analysis. The author thus played a dual role as both of teacher and researcher.

Aim(s)

The case study is immediately designed as a support activity, offered by the professors, through an 'expert' student, to help student success in the German language written course (2nd year), but also to familiarize themselves with the foreign language and to enable them to become autonomous. The objective is to facilitate learners' capacity to make autonomous decisions regarding their learning, encompassing aspects such as learning objectives, content, strategies and the management of their own learning process. (Baumann 2018, p. 255) The goals of the study are based on the achievement of the B1/B1.2 threshold level, but are gradually transformed into collective processes, determined by external factors such as motivation.

Methodology

The work carried out was conducted in a university context, at the Department of Humanities (DISUM) of the University of Catania (UNICT), within a two-month period. The methodology used in the study involved the collection of data such as the learning objectives and language biography of the participants through the administration of an initial questionnaire, in which also personal data such as general information, needs, career, opinions and difficulties were collected. Similarly, the support activity was concluded with a final questionnaire that

evaluated both the activity and the participants from a didactic and social perspective. A weekly calendar of meetings was organized for a total of eight meetings. During each meeting, the topics to be revised or enhanced were selected, and guided text comprehensions, role plays, and written productions were carefully chosen. Each planned activity is modelled after the structure of the written exam. This consists of a test of oral and written comprehension, written production as well as grammar and vocabulary exercises aimed at achieving B1-level knowledge and skills (https://www.disum.unict.it/corsi/l-11/insegnamenti?seuid=D44DEC4B-469A-48C0-B221-65C6BF704148). It was thus decided to tackle a grammar itinerary that included the crucial and characteristic elements of the written exam. It was only possible to set up such a timetable according to the needs of the participants, as gathered through the initial questionnaire.

Data Collection and Participants

To provide an accurate and clear analysis of the data, it was decided to adopt a 'mixed-methods research' approach, combining both qualitative and quantitative aspects. The number of subjects involved in the educational experiment is ten, each of whom was informed from the outset of the activity being carried out and how the data would be recorded. The case study involves students with varying levels of German proficiency, including those who are new to the language (5/10) and those with previous knowledge (5/10). All personal details were anonymized using only identifying abbreviations to respect the anonymity of the data. The first step was to gather thoughts, opinions, and emotions regarding learning with the support of an experienced colleague. It is important to note that the initial questionnaire was administered in the beginning and, therefore, the participants expressed their opinions based solely on their personal experience without any direct involvement in the activity, so as not to invalidate the whole study. Subsequently, clear lines of demarcation of differences of thought will be presented with much more awareness than at the beginning. The initial questionnaire is designed to collect the primary data required for modelling the teaching activity. It consists of 10 open-ended questions (e.g. 'What was your reason for attending this course?'). The collected data were then subjected to qualitative analysis in order to construct a detailed profile of the learners, comprising their needs, expectations, reasons and a range of other information (including their origin and familiarity with the language).

The following is a list of responses to question 9 that will facilitate a more comprehensive understanding of the advantages of the peer teaching approach (both the questions and the answers have been here translated from Italian and reported into English):

> 9) WHERE DO YOU SEE THE MOST SIGNIFICANT DIFFERENCES IN TEACHING/LEARNING THROUGH AN EXPERIENCED STUDENT AND A PROFESSOR? (INCLUDING THE EMOTIONAL ASPECT)

GR: When working with an experienced student, one may feel **comfortable** asking questions that are considered more basic. These are questions that one may not feel comfortable asking a professor during a lesson, in order to avoid disrupting the class or falling behind on basic topics.

LD: The experienced student can **better understand** the difficulties and be more present.

MB: According to my experience, through teaching with an experienced student one has the possibility for mutual learning, and we can **fearless** overcome difficulties. The student's understanding of misunderstandings and doubts can be particularly helpful, including emotional aspects.

SM: I think the main differences between learning through an experienced student and a teacher are essentially twofold: on the one hand, the former, being not only a student but also a native Italian speaker, can understand with **greater empathy** the linguistic difficulties of his colleagues and can provide less theoretical and more practical 'tricks' to remember grammatical rules; on the other hand, the latter, represents the main point of reference for students, legitimised both by an undeniable and superior linguistic competence and by many years of experience in the field.

From the individual responses, bold expressions such as 'better understand', 'comfortable', 'greater empathy', 'fearless', highlight the socio-emotional openness of peer communication and suggest direct horizontal space between the parties, rather than a system dominated by a verticalization of roles.

Activity Example

The participants are divided into two groups, and the game starts. Group A is provided with flashcards, the solutions to which are then conveyed to Group B, and vice versa. The game comprises a variety of tasks, including identifying the preposition associated with a given verb, determining the corresponding translation (German to Italian), identifying grammatical categories, and recognising and forming subordinate sentences. The participants are instructed to work in groups without the expert student providing guidance. In this phase, the peer student assumes the role of supervisor. No significant issues are observed, and in fact, the participants are motivated by the curiosity and determination inherent in the game. The following flashcards illustrate some of the tasks included in the game:

Figure 1
Flashcards

PASSIV? Die Wolken bedecken den Himmel.	AKTIV? Der Himmel wird durch die Wolken bedeckt.
TEMPORALSATZ: Markus will mit seinen Freunden ausgehen. Markus muss seine Hausaufgaben machen.	WAS FÜR EINEN NEBENSATZ? Bevor Markus mit seinen Freunden ausgeht, muss er seine Hausaufgaben machen. // Nachdem Markus seine Hausaufgaben gemacht hat, geht er mit seinen Freunden aus.

What is immediately highlighted by the activity is the ability developed by the students to self-manage the error: Students are able to recognize, process, and correct linguistic errors without fear of punishment through the evaluation system. Instead, errors are welcomed and normalized in the collective learning process.

Results

As with the start of the activity, an effort was made at its conclusion to provide a clear perspective on the results. This was achieved by proposing a clear attribution of values and estimates of the case study through a final questionnaire.

The following testimonies demonstrate the benefits and positive effects of peer-to-peer teaching on both emotional and didactic aspects. This confirms the concept of self-regulation or self-management. Peer-to-peer teaching not only focuses on the individual but also enhances aspects that are not adequately developed in a traditional didactic system as we see from responses to question 4. of the final questionnaire:

> 4. INDICATE AT LEAST THREE ADVANTAGES OF PEER-TO-PEER TEACHING
>
> MB: 1. It promotes the sharing of knowledge, skills and information among peers. / 2. It is a more informal environment and encourages participants to actively interact. / 3. It can lead to significant learning progress.
> VP: 1. I always have the opportunity for an immediate clarification when doubts or perplexities arise. / 2. I find language more stimulating, which helps me to focus for longer. / 3. I definitely feel comfortable exposing my gaps and asking questions.
> SM: 1. Opportunity to receive language learning tips or 'little tricks' and strategies […]. / 2. Opportunity to overcome the 'fear of speaking loud in class' and ask 'trivial questions' by perhaps more insecure or shy students. / 3. Important support tool not only linguistic but also (dare I say it) psychological […].

Out of 10 students, 4 participated in the written exam of German Language and Translation 2, which we remember as the primary goal of the study, in the January 2023 exam session. In fact, analysing the results of the previous exam sessions, in particular one of the students managed to achieve a top mark of 5 more than in September 2022, where she had received 16/30, and October 2021, where she had obtained the same score of 16/30. (See Figure 2 – MB's final results).

Figure 2
MB's Final Results
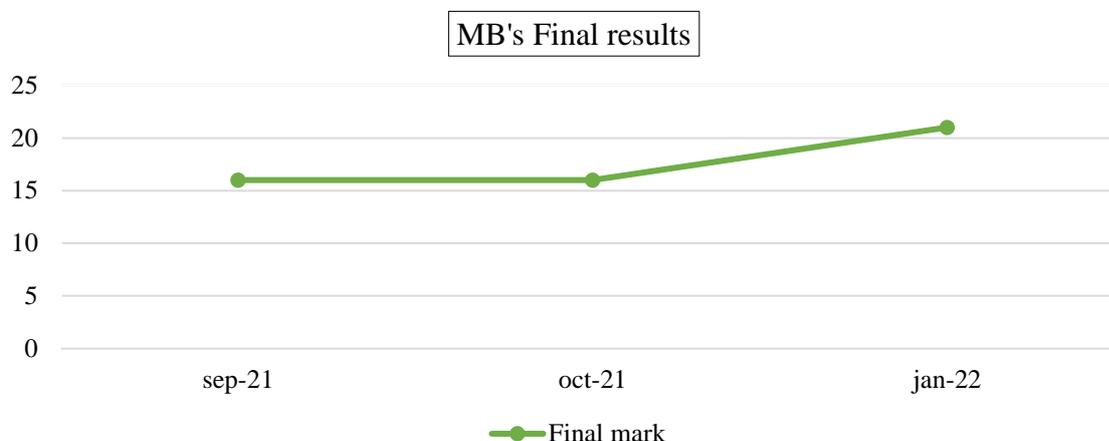
The remaining three students, on the other hand, scored 15/30, 15/30 and 12/30 respectively. Even though the results do not point to excellence, it is crucial to note that the support activity served to motivate the participants and to gain motivation, overcoming the insecurities and worries that prevented them from taking part in the written exam. Indeed, by responding to question 6 of the final questionnaire and its constituent sub-sections (nos. 1, 2, 3, 4 and 5), the students *in toto* (10/10) indicated the highest level of satisfaction (5 – 'Absolutely Satisfied').

> 6. PLEASE RATE THE FOLLOWING STATEMENTS IN THE TABLE BELOW IN A SCALE FROM 1 (ABSOLUTELY NOT) TO 5 (ABSOLUTELY YES):

N°1) PEER TEACHING MAKES YOU FEEL IN AWE/COMPETITIVE.
N°2) LEARNING FROM ANOTHER STUDENT HAS MADE ME MORE CONFIDENT IN THE CLASSROOM WITH COLLEAGUES/TEACHERS.
N°3) I WOULD LIKE THE UNIVERSITY TO PROPOSE OTHER SIMILAR ACTIVITIES.
N°4) I NOW UNDERSTAND HOW TO DEAL WITH THE GERMAN LANGUAGE EXAM.
N°5) I MANAGED TO FILL IN THE GAPS I HAD.

On the other hand, the organization of the meetings and their conduct enabled the experienced student to learn alternative teaching methods as well as to refine their knowledge and skills required from the outset. The initial difficulties were transformed into motivational experiences.

In conclusion, the primary findings of the case study underscore the efficacy of peer-to-peer teaching in enhancing students' emotional and academic engagement, as well as fostering motivation in exam participation. Refocusing on the primary aim of the study – to integrate the principles of sociocultural theories in order to evaluate the effectiveness of peer-to-peer teaching within both academic and emotional contexts – the obtained results both affirm and expand upon the initial hypotheses. Specifically, they demonstrate the positive impact of these approaches on participants' language development and overall academic engagement. The theoretical framework of Vygotsky's principles of mediation and negotiation of meaning was reflected in students' performance during structured, competitive learning activities. In these sessions, groups not only interacted to achieve a shared goal but also engaged in mediation and negotiated the meaning of signs and information to complete the task. Thus, peer-to-peer teaching functioned not only as an academic support tool but also as a means of promoting emotional development and self-regulatory skills among students; this effect is clearly observed in the responses of students interviewed through the final questionnaire (cf. MB and VP's responses to question 4). These findings suggest that peer-to-peer teaching facilitated a knowledge-sharing dynamic within an informal, interactive environment, effectively reducing insecurities and promoting self-regulation. Consequently, they demonstrate that peer-to-peer models and cooperative learning methods can enrich the learning process, mitigating the limitations of traditional teaching approaches and contributing to students' overall well-being. A significant area for future research could be to explore and identify which specific language skills — speaking, writing, listening, or reading — may benefit most from these approaches.

Conclusion

The work addresses issues related to the application of sociocultural theory to didactics, with a particular focus on the use of a peer-to-peer system based on interaction and cooperative learning in the context of German language teaching and learning. The study demonstrates the impact of such systems on learning outcomes and provides insights into the potential benefits and challenges associated with their use. Another aim of this research was to use Vygotsky's theory as a basis for a teaching experiment. In particular, this was to demonstrate how effectively uninhibited mutual help implemented the knowledge and skills of the study group.

While group tasks may seem simple, the mechanisms that govern their dynamics are far more complex than simply executing a task. In fact, group members not only improve their language skills, but also develop their socio-communicative abilities through relationships, negotiations, proposals, and requests.

Vygotsky's theories, considering the learner as the centre of an entire educational organization and planning, rather than a mere container for information, were a surprising concept for learning contexts at the time. If we understand learners as individuals with a socio-cultural background, they will benefit from approaches and methodologies that consider their emotional, social, and relational development from the beginning.

On the other hand, the didactic experiment overcame the learner-teacher dichotomy, as through the figure of an experienced student, it was shown how the students were more motivated in their responses and learning. The didactic experiment did not allow all students to pass the examination due to basic knowledge gaps. However, it changed the participants' conception of language after attending the support activity.

Further research on peer-to-peer (P2P) learning in German language acquisition should concentrate on a number of key areas in order to gain a deeper understanding of its efficacy in comparison to more traditional teacher-led instruction. Furthermore, it could be significant to investigate the impact of peer feedback on language acquisition, in order to establish whether it facilitates or impedes learning outcomes and enhances learners' confidence in using German. Another pivotal aspect of P2P learning is its ability to foster a more profound comprehension of German culture, idiomatic expressions and context-specific language use through interactive peer exchanges. By addressing these questions, further research could provide invaluable insights into the strengths and potential limitations of peer-based learning models for German language learners.

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